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Can Bloomberg beat noise?

Mayor Bloomberg recently launched a second attack on noise. Eighteen months ago his "operation silent night "was aimed at some particular locations, but control is now to spread to the whole of New York City, with a tough new code to give relief to those who wish to buck the New York image of "the city that never sleeps".

This ambitious project, a first major overhaul in the Noise Code for 30 years, is focussed on a number of main areas: construction noise, commercial music premises, air conditioning equipment, the introduction of a "plainly audible" standard and removal of vague statements from the earlier code.

Two components are particularly interesting.

- The use of audibility at specified distances from the source as a criterion for "unreasonable" external noise
- The use of C-weighted measurements for disturbance by internal noise from some outside sources.

External noise will be assessed by enforcement officers, normally police, who will be asked to decide whether the noise is "plainly audible". For example, a selection of the limits is:

- Music from commercial premises must not be plainly audible at 15 feet or more from the building line of the premises, but with up to 20 second remissions for open doors, when patrons are entering or leaving.
- Music from personal audio devices in the street, or in vehicles, must not be plainly audible beyond 25 feet from the source. Boom cars and ghetto blasters beware!
- Sound from earphone listening equipment, when used on public transport, must not be audible beyond 5 feet from the source.
- Motor cars must be sufficiently silenced so that they are not audible at 100 feet, whilst motorcycles have a distance limit of 200 feet
- Electronic chimes on ice cream vans and similar sales vehicles, will have an audible distance limit of 50 feet.

Some of the motivation for the "audible at a distance" criteria is to avoid the use of sound level meters, which Bloomberg considers to be difficult to use and prone to errors. He is probably correct in this for Type 2 meters in the hands of the police.

Although audibility criteria are used in other American cities, one can anticipate problems, as much will depend on the background noise at the time. Music at 15 feet from a premises may be inaudible during busy New York daytime traffic, but become audible at night. It is the night, and the hearing thresholds of individual police officers, which will determine the situation.

Bloomberg's control of indoor noise disturbance is a good step forward. C-weighted decibels and third octave analysis are used. For example, internal noise from music from commercial premises has the following limits.

- Must not exceed 42dBA
- Must not exceed 45dB in any one-third octave band between 63Hz and 500Hz
- Must not cause greater than 6dB(C) increase above the C-weighted ambient level

This is a real attempt to deal with the bass beat from the club next door.

Another step forward in relation to intruding bass noise is a room vibration limit of 75dB re 10^{-6} inches/ sec. This unit, unfamiliar outside the USA, translates to 0.14mm/s, which is a good residential standard. Mayor Bloomberg is to be commended for his innovative approach, particularly the control of both low frequency noise and vibration levels, in which he is breaking new ground.

BALANCING ACTS, AGAIN

In Australia, Melbourne residents who value a good night's sleep have pressured the council into banning night time (11pm – 6am) rubbish collections. But now fears are being expressed that collections delayed until daytime would put rubbish trucks in competition with cars for access to streets and lanes. Councillors are watching closely to see if the fears expressed will be justified. The vote-collector's question is, if streets do get blocked, do blocked streets annoy more people than noisy night time refuse collections?

THE KOKOMO HUM

The "Kokomo Hum" really did exist. In Kokomo, Indiana USA, there was a hum. Since 1999 more than 120 Kokomites have complained of health problems including nausea, fatigue and headaches, all attributed to the Kokomo Hum. Now the sources of the hum have been identified and dealt with – air compressors in one plant were adjusted, as was a roof ceiling fan in another factory, the former a low frequency noise, the latter below the threshold of human hearing. Yet still the sick complain of the same symptoms. If the cause has gone, why should the symptoms remain?

SNORERS

For many Americans, simply sharing a bed may cause or worsen their sleep problems. According to a new Harris Interactive survey of adult Americans who share a bed with a spouse or partner most nights, approximately one in four (24%) of those surveyed reported that their partners' sleep problems interfere with their own sleep. In fact, of those surveyed who indicated that they lose sleep due to their partners' sleep problems, 47% reported losing at least 3 hours of sleep per week – and 23% reported losing 5 or more hours. A bedmate's snoring was responsible in over a third of cases.